

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of managing flow of datagram traffic, the method comprising:

~~providing a first networked device that is operably connected to a second networked device;~~

~~transferring receiving datagrams from a first port of [[the]] a first device [[to]] at a first port of [[the]] a second device using a pathway that is operably connected to a second port of the first device and a second port of the second device;~~

~~determining, at the second device, selectively pausing an individual port on the first device that is causing oversubscription of the first port of the second device;~~

~~transmitting a pause frame from the second device to the first device, the pause frame causing the individual port to pause transmission of the datagrams using the pathway; and~~

~~transferring receiving datagrams from a third port of the first device [[to]] at the first port of the second device using the pathway that is operably connected to the second port of the first device and the second port of the second device, while the individual port on the first device is paused.~~

2. (Currently Amended) The method of claim 1, further comprising:

re-activating [[a]] ~~the individually~~ paused port [[by]] ~~including~~ transmitting a re-activation signal to the paused port.

3. (Currently Amended) The method of claim 1, further comprising:

re-activating [[a]] ~~the individually~~ paused port pursuant to the detection of a condition wherein the first port of the second device has datagram traffic flowing therethrough in an amount that is below a lower trigger value.

4. (Currently Amended) The method of claim 1, further comprising:

re-activating [[a]] ~~the individually~~ paused port pursuant to the passage of a pre-determined time increment.

5. (Currently Amended) The method of claim 1, wherein the selectively pausing transmitting the pause frame comprises using in-band control frames to pause the individual port.

6. (Currently Amended) The method of claim 1, wherein the selectively pausing transmitting the pause frame comprises using separate pathways between the first and second networked devices to transmit datagrams and control frames.

7. (Currently Amended) The method of claim 1, wherein the selectively pausing transmitting the pause frame comprises using a non-memory-consuming communication to pause the individual port.

8. (Currently Amended) The method of claim 1, wherein the selectively pausing transmitting the pause frame comprises referencing a listing of ports that are over-subscribed.

9. (Currently Amended) The method of claim 8, wherein the selectively pausing transmitting the pause frame comprises periodically updating the listing of ports that are over-subscribed.

10. (Currently Amended) The method of claim 1, wherein the selectively pausing determining comprises selectively pausing determining individual ports on devices other than the first and second device.

11. (Currently Amended) A method of managing flow of datagram traffic, the method comprising:

providing a first networked device that is operably connected to a second networked device;

transferring receiving datagrams from a first port of [[the]] a first device [[to]] at a first port of [[the]] a second device using a pathway that is operably connected to a second port of the first device and a second port of the second device;

determining, at the second device, an individual port on the first device that is causing oversubscription of the first port of the second device;

signaling the first port of the first device to continue sending ~~send~~ fewer datagrams to the first port of the second device at a reduced rate, based on the determining when an over-subscription is detected at the first port of the second device; and

transferring receiving datagrams from a third port of the first device [[to]] at the first port of the second device using the pathway that is operably connected to the second port of the first device and the second port of the second device, while continuing to receive the datagrams at the reduced rate from the first port of the first device is sending fewer datagrams to at the first port of the second device.

12. (Previously Presented) The method of claim 11, wherein the signaling comprises signaling the first port of the first device to send datagrams in proportion to a total number of datagrams attempting to reach the first port of the second device.

13. (Previously Presented) The method of claim 11, wherein the signaling is performed using a non-memory-consuming communication to signal the first port of the first device.

14. (Previously Presented) The method of claim 11, wherein the signaling comprises broadcasting a signal that alerts ports on the network that the first port of the second device is over-subscribed.

15. (Currently Amended) The method of claim 11, wherein the transferring receiving datagrams from a first port of a first device at a first port of a second device comprises referencing a listing of ports on the network that are over-subscribed before transferring a datagram between the first port of the first device to the first port of the second device.

16. (Currently Amended) The method of claim 11, further comprising:
resuming unrestricted datagram transmission to receipt at the first port of the second device [[by]] including broadcasting a signal.

17. (Currently Amended) The method of claim 11, further comprising:

resuming unrestricted datagram ~~transmission to receipt~~ at the first port of the second device when a total number of datagrams attempting to reach the first port of the second device falls below a lower trigger value.

18. (Currently Amended) The method of claim 11, further comprising:

resuming unrestricted datagram ~~transmission to receipt~~ at the first port of the second device after passage of a pre-determined time increment.

19. (Previously Presented) The method of claim 11, wherein the signaling comprises using in-band control frames.

20. (Previously Presented) The method of claim 11, wherein the signaling comprises using a separate link to transmit control frames.

21. (Currently Amended) A communications ~~system device~~ comprising:
~~a first data distribution means operably connected to a second data distribution means;~~

~~a first communications means for transferring receiving datagrams from a first port of [[the]] a first data distribution means [[to]] at a first port of [[the]] a second data distribution means;~~

~~determining means for determining, at the second data distribution means, individual ports on the first data distribution means that cause oversubscription of the first port of the second data distribution means;~~

control means for selectively pausing the individual ports that are causing oversubscription of the first port of the second data distribution means; and

means for ~~transferring receiving~~ datagrams from a second port of the first data distribution means [[to]] at the first port of the second data distribution means, while the individual ports are paused.

22. (Currently Amended) The system device of claim 21 wherein, further comprising:

~~a second communications means between the first data distribution means and the second data distribution means wherein the is connected to a second communications means that is non-lossy.~~

23. (Currently Amended) The system device of claim 21, further comprising storage means for storing information concerning which ports in the network are over-subscribed.

24. (Currently Amended) A communications system device comprising:

~~a first data distribution means operably connected to a second data distribution means for distributing datagrams over a network;~~

first communications means for transferring receiving [[the]] datagrams from a first port of [[the]] ~~a~~ first data distribution means [[to]] ~~at~~ a first port of [[the]] ~~a~~ second data distribution means;

determining means, at the second device, for determining an individual port on the first data distribution means that is causing oversubscription of the first port of the second data distribution means;

control means for signaling the first port of the first data distribution means to send fewer datagrams to the first port of the second data distribution means, based on the determining when an over subscription is detected at the first port of the second data distribution means; and

means for transferring datagrams from a second port of the first data distribution means [[to]] ~~at~~ the first port of the second data distribution means, while continuing to receive datagrams from the first port of the first data distribution means ~~is sending fewer datagrams to at a reduced rate at~~ the first port of the second data distribution means.

25. (Currently Amended) The system device of claim 24, wherein further comprising:

~~a second communications means for allowing communication between the first~~

data distribution means and the second data distribution means is attached to, wherein the a second communications means that is non-lossy.

26. (Currently Amended) The system device of claim 24, further comprising:
storage means for storing information concerning which ports in the network are over-subscribed.

27-30. (Cancelled)

31. (New) A communications device comprising:
an interconnect port controller configured to receive datagrams from a first port of a first device at a first port of the device; and
a memory unit controller configured to determine, at the device, individual ports on the first device that cause oversubscription of the first port of the device, wherein
the interconnect portion controller is configured to selectively pause the individual ports of the first device that are causing oversubscription of the first port of the device, and to receive datagrams from a second port of the first device at the first port of the device, while the individual ports are paused.

32. (New) The device of claim 31, further comprising:
a memory unit configured to store information concerning which ports in the device are over-subscribed.

33. (New) A communications device comprising:
an interconnect port controller configured to receive datagrams from a first port of a first device at a first port of the device; and
a memory unit controller configured to determine, at the device, individual ports on the first device that cause oversubscription of the first port of the device, wherein
the interconnect port controller is configured to signal the first port of the first device to

continue sending datagrams to the first port of the second device at a reduced rate, based on the determining, and configured to receive fewer datagrams from the first port of the first device at the first port of the device.

34. (New) The device of claim 33 further comprising:

a memory unit configured to store information concerning which ports in the network are over-subscribed.